

Following the keys to the phyla, other keys are given to the orders of plants, including for convenience the phyla of the two kingdoms below the PHYTA. The arrangement of the orders follows closely the classification of Bessey, with the flowering plants, ANTHOPHYTA, divided into Dicotyledoneae and Monocotyledoneae, the first of these classes beginning with the order Ranales and ending with the Compositales—the Salicales, Fagales, Juglandales and other orders with simplified flowers coming well towards the end of the series, the second class begins with the Butomales and Alismatales and ends with Cyperales and Graminales.

A glossary to the terms used is given, an outline of the classification and a list of references to works on classification of plants and animals, chiefly, if we except the work of Bessey, works published in the last ten or twelve years.

FIELD TRIPS OF THE CLUB

TRIPS OF AUGUST 26 AND 27 TO THE WATCHUNG MOUNTAINS

Eleven members and guests were present on the trip of August 26 to Seeley's Notch, near Scotch Plains, N. J., and nine on the trip the following day to Wetumpka Notch and Washington Valley, near Plainfield, N. J. Four hundred and eighty-nine species and varieties of wild plants were identified, including 18 new records for the area, bringing the total for this small area now to 1,492, of which 82 percent are native and 18 percent naturalized. Species found for the first time in our area on these trips included the floating pondweed (*Potamogeton natans*) on Seeley's Pond, the slender knotweed (*Polygonum tenue*) on the exposed trap-rock cliffs, the starry campion (*Silene stellata*), the short-stalked false-pimpernel (*Lindernia dubia* var. *major*), the fragrant bedstraw (*Galium triflorum*), the low cudweed (*Gnaphalium uliginosum*), a recently introduced and rapidly spreading European sow-thistle (*Sonchus uliginosus*), two bush-clovers (*Lespedeza hirta* and *L. violacea*), and several fungi, *Coriulus nigromarginatus*, *Hapalopilus gilvus*, *Laetiporus speciosus*, *Irpex lacteus*, and *Hypholoma sublateritium*. The false-indigo (*Amorpha fruticosa*) reported by Mackenzie in 1921 and not reported since, was rediscovered,

as well as the very rare true ginseng (*Panax quinquefolium*), reported previously from the region only by Miller in 1915 and by Mackenzie in 1918 and not reported or found since. The mud-plantain (*Heteranthera reniformis*) reported by Wilson from our area in 1901 and by Johnson in 1934, was found in great abundance on Seeley's Pond. The red-berried elder (*Sambucus pubens*), never before seen on our trips to the region, although reported by Tweedy in 1879 and by Miller in 1915, was found, as well as the unexpected American cranberry-bush (*Viburnum trilobum*) the latter in full fruit. Other interesting plants observed were *Asclepias verticillata*, *Celtis crassifolia*, *Dioscorea paniculata*, *Elodea canadensis*, *Echinocystis lobata*, *Crocianthemum canadense*, *Desmodium canescens*, *Lespedeza frutescens*, *Lobelia siphilitica*, *Solidago flexicaulis*, *Tracaulon arifolium*, *Svida rugosa*, *Persicaria lapathifolia*, *Cuscuta gronovii* and *C. coryli*, *Laportea canadensis*, *Gerardia purpurea*, *Liatris spicata*, *Veronicastrum virgininum*, *Spiranthes cernua*, *Boehmeria cylindrica*, *Corallorrhiza maculata*, *Atragene americana*, and *Mentha gentilis*. Dittany (*Cunila origanoides*) and both species of yellow false-foxglove (*Aureolaria flava* and *A. virginica*) were found in bloom and splendid stands of the water-starwort (*Callitriche palustris*). Five kinds of wild-lettuce were observed in flower, *Lactuca spicata*, *L. canadensis*, *L. sagittifolia*, *L. virosa*, and *L. virosa* var. *integrata*. *Phaseolus vulgaris*, *Citrullus vulgaris*, *Aralia spinosa*, *Acer palmatum*, *Lepadena marginata*, *Baptisia australis*, *Lonicera morrowi*, and *Bignonia radicans* were found as escapes, and *Miscanthus sinensis* var. *variegatus*, *Ilex opaca*, and *Juglans regia* as persistents. Large numbers of Scotch pine (*Pinus sylvestris*) were observed invading fields in the manner of our native red-cedar. Ecological aspects of the flora were pointed out, including the story of how two native goldenrods have all but exterminated the Jerusalem artichoke (*Helianthus tuberosus*), probably introduced by the Indians, which a few years ago existed in very large pure-stand colonies in several spots in the area.

H. N. MOLDENKE

TRIP OF SEPTEMBER 24 TO MINEOLA, N. Y.

The trip was for Myxomycetes, to a densely wooded area of 40 acres in the foothills of the moraine, about two miles north of the village of Mineola. This locality, known as Albertson, is the

best small unit for Myxomycetes on Long Island, and in the past 15 years about 120 species have been found there. No matter what the weather has been prior to an outing, there is always something to see or find, and with good conditions on other occasions as many as 40 species have been observed fruiting at one time.

The party, consisting of 11 persons, met at the Mineola railroad station at 11 a.m. where cars were waiting to take them to the rendezvous. An inspection of some manure piles yielded *Fuligo cinerea* (Schw.) Morg., usually found on such habitats, together with some associated species. After that came lunch under a spreading tree, during which Mr. Charles E. Mohr of the Philadelphia Academy of Natural Sciences displayed a number of beautiful transparencies of Myxomycetes that he had photographed in natural colors; Mr. Frank G. White exhibited specimens collected by him during the summer; and I explained the characters of about 25 rare or interesting forms found in the Great Smoky Mountains National Park in August. The afternoon was spent in roaming through the forest, examining rotten logs, brush piles, and dead leaves, which search brought about 20 species in all, less than usual, because the drought of the preceding summer was not conducive to the abundant appearance of the fruiting bodies. Noteworthy examples among the forms collected were *Physarum leucopus* Link, a new record for Long Island; *Physarum bogoriense* Racib., which has been found only once before on Long Island; and splendid developments of the beautiful *Physarum melleum* (Berk. and Br.) Masee. The most interesting features of the trip were the field observations on the species *Physarum polycephalum* Schw. During our visit to the same area in June, a development of the common oyster mushroom was noticed on the sides of a tree about 15 feet from the ground. One of the party climbed the tree and brought it down when it was found to be covered with the yellow plasmodium of an unknown slime-mold. Several of the party who took portions of the plasmodium reported to me that it had developed sporangia of *P. polycephalum*. During the present foray many specimens of the oyster mushroom were observed, and in almost every instance the plasmodium was feeding thereon, or it was covered with the fruiting bodies in various stages of maturity. Finally a mushroom was found close to the ground with a large plasmodium transforming itself into fruit, and the mature

sporangia of *P. polycephalum* spreading away on leaves and twigs. It was a sight to be remembered by those not familiar therewith.

These trips are not so much for the purpose of obtaining a large number of specimens, although this is often the case with good conditions, but to instruct members in the field habits and life history of the Myxomycetes, and also teach them proper methods in seeking the fruiting bodies. When this knowledge has been acquired, it will be possible to find them in all suitable situations at the proper time. They are common and abundant although rarely collected by the untrained mycologist.

ROBERT HAGELSTEIN

PROCEEDINGS OF THE CLUB

MINUTES OF THE MEETING OF OCTOBER 3, 1939

The meeting of the Torrey Botanical Club held at the Brooklyn Botanic Garden on October 3, 1939, was called to order by the President, Dr. Arthur H. Graves at 8.30 p.m.

Twenty-eight persons were present.

The following persons were elected to membership: *Annual*—Miss Clara Burghart, 419 Devon St., Kearny, N. J.; Dr. Alberto Castellanos, Museo Ciencias Naturales, Chubut 450, Buenos Aires, Argentina; Dr. Horacio R. Descole, Miguel Lillo 205, Tucuman, Argentina; Mr. Charles Ericson, 101 West 78th St., New York, N. Y.; Mr. Louis E. Hand, 8061 Fairview St., Holmesburg, Philadelphia, Pa.; Miss Edna J. Malone, 3045 Palisade Ave., New York, N. Y.; Prof. Henry Pittier, P. O. Box 255, Caracas, Venezuela; Dr. H. W. Rickett, New York Botanical Garden, Bronx Park, New York, N. Y.

Associate—Miss Dorothy Fell, Woodridge, N. J.; Mrs. Louis E. Hand, 8061 Fairview St., Holmesburg, Philadelphia, Pa.; Mr. William A. Happel, Scotch Plains, N. J.; Miss Suzanne Haupt, 222 Walnut St., Montclair, N. J.; Miss Dolores R. de M. Hunn, 1218 Prospect Ave., Plainfield, N. J.; Miss Mary E. Mitchell, 37-08 Bowne St., Flushing, N. Y.; Mrs. Lazella Schwarten, New York Botanical Garden, Bronx Park, New York, N. Y.; Miss Frieda Seemann, 611 Bailey Ave., Elizabeth, N. J.; Miss Louise W.